

Is the tank considered a part of the kit or aftermarket system for certification purposes?

# Questions

## Frequently Asked Questions

Here are answers to some commonly asked questions about emissions certification of aftermarket conversions.

### Why are the costs of emissions certification so high?

#### *EPA*

Three components contribute to certification costs—fees, emission testing, and the labor associated with organizing and processing the certification. The EPA does charge fees to provide the certification service. Recognizing that the aftermarket vehicle conversion industry is still in its infancy, the EPA is currently looking at methods to reduce or eliminate fees for certifying to certain emissions standards. The EPA also provides an alternative method for determining fees. In regard to emissions testing, the EPA has attempted to reduce costs for small volume manufacturers by providing alternative methods to derive DFs (for example, using EPA-assigned DFs or using assigned DFs from an abbreviated durability test). You can minimize the time required for organizing and processing of the certification by having a well-conceived plan and following the EPA's directions for the information required on the application (see page 12).

#### *California*

In California, two components contribute to the certification costs—emissions testing and the labor associated with organizing and processing the certification. California does not charge any fees for the certification service. Recognizing that the durability portion of emissions testing poses a hardship on manufacturers, CARB has developed alternative procedures for deriving DFs. CARB also stresses the need to have a well-conceived plan and to follow its directions for the certification application.

### Is the tank considered a part of the kit or aftermarket system for certification purposes?

#### *EPA*

By definition, the tank is an emissions control component. You should list it as a system component, and describe it in the application. Holders of Certificates of Conformity must submit requests to the EPA for approval to change the size, model, or number of tanks installed. For metal tanks, this is normally considered a formality. However, if it is possible for fuel to permeate through the tank walls or fittings, the EPA is likely to conduct a formal evaluation before granting any approval for changes.

#### *California*

You are not required to list the tank as a system component. However, you must list all hoses, because they are possible sources of leaks that could affect evaporative emissions.

**Questions****How long can vehicles be converted using the the EPA and California aftermarket certifications?***EPA*

The EPA Certificate of Conformity has a finite life. Conversions can start on the effective date of the certificate but must end no later than December 31 of the model year for which it is granted. The maximum period possible for conversions is one year and 364 days on that certificate (if the effective date was January 2 of the year prior to the model year). To convert that same engine/vehicle past the December 31 date, you would have to apply for a new certificate based on the standards and regulations that apply for the next model year (see page 9).

*California*

You may start conversions on the approval date of the EO. The EO does not list an end date and you can convert vehicles for however long engine families/vehicles are available to convert using that same EO.

**Does the engine family name change as a result of aftermarket certification?***EPA*

Yes, the engine family name changes to reflect the model year for which the certification is being granted (if different from that of the original engine family) and the name of the company that has received the certification. Also, three characters are reserved for your company's use (see page 9).

*California*

No, the engine family name stays the same.

**Do CNG and LPG aftermarket conversions need to meet the same OBD regulations as gasoline vehicles?***EPA*

Yes, but you may request waivers from the federal OBD regulations. Providing you show technical justification, the EPA may grant waivers, applicable to the alternative fuel portion only. The balance of the OBD system must operate in compliance with the regulations. This waiver is available up to and including the 1998 model year. The EPA has proposed to extend the waivers up to and including the 2004 model year (see page 23).

*California*

Yes, but you may request a waiver from complying with the OBD II regulations; this waiver is available up to and including the 2004 model year. The aftermarket conversion system must still comply with California OBD I regulations (see page 34).

**Do manufacturers have to provide an emissions warranty as part of the certification requirements for aftermarket conversions?***EPA*

Yes, you are required to provide an emissions warranty. For light-duty vehicles and trucks, the warranty is in two parts—an emissions performance warranty and an emissions design and defect warranty. Both are two years or 24,000 miles, whichever comes first, and eight years or 80,000 miles, whichever comes first, for the catalytic converter, the OBD device, and the electronic control unit. Heavy-duty engine manufacturers are

required to supply an emissions design and defect warranty of five years or 50,000 miles, whichever comes first, for heavy-duty Otto-Cycle engines and light heavy-duty diesel engines, and five years or 100,000 miles, whichever comes first, for all other heavy-duty engines. The warranty covers the labor to diagnose and repair or replace the part, as well as any parts that need replacing. The emissions warranty period does not extend beyond the emissions warranty that remained on the original vehicle prior to conversion (see page 24).

### *California*

Yes, an emissions warranty is required. The same warranty applies to passenger cars, light-duty, medium-duty, and heavy-duty vehicles. The warranty period is three years or 50,000 miles, whichever comes first, and seven years or 70,000 miles, whichever comes first, for high-priced components. The warranty covers the labor to diagnose and repair or replace the part as well as any parts that need replacing. The installer is also required to supply a warranty that the installation was done correctly. The period of the warranty is three years or 50,000 miles, whichever comes first. The warranty is to cover the full repair of any damage resulting from an incorrect installation. The warranty period for both the manufacturer and installer starts on the date of conversion; the vehicle mileage at that time is considered to be zero (see page 34).

### **If I obtain an EPA emissions certification for a 50-state (or California-only) vehicle, do I still need to obtain certification in California?**

California requires that you apply for certification from CARB for vehicles that are to be used in California. For a California-only vehicle, seek certification from CARB first, and then from the EPA. For a 50-state vehicle, obtain EPA certification first, and then from CARB.

### **If I obtain a California aftermarket certification (an E0), will I be exempt from enforcement actions under the Clean Air Act anti-tampering provisions?**

In a September 4, 1997 EPA policy document, addendum to Memorandum 1A “Tampering Enforcement Policy for Alternative Fuel Aftermarket Conversions,” the EPA clarifies the tampering enforcement policy and revises the terms for establishing a reasonable basis that performing an aftermarket conversion will not adversely affect emissions. If you follow one of the three options that are listed in the addendum, the EPA will not regard the conversion as a violation of the anti-tampering provisions. One of those options is to certify according to “California Certification and Installation Procedures for Alternative Fuel Retrofit Systems for Motor Vehicles Certified for 1994 and Subsequent Model Years and for All Model Year Motor Vehicle Retrofit Systems Certified for Emission Reduction Credit.” This applies to a California-only engine family for use in California only or a 50-state engine family for nationwide use. The EPA no longer accepts that the pre-1994 California procedures provide an adequate demonstration that the aftermarket conversion will comply with the applicable emission standards for the vehicle’s useful life (see page 7).

### **When converting vehicles using Option 3 from the addendum to Memo 1A, do the FTP 75 results on the alternative fuel have to be better than those on gasoline?**

No. The result that is to be compared to the emission standard must include the FTP test and the appropriately applied DF. This overall result must then be compared to the standard for the model year of the vehicle or engine being converted. All results must be within the standards for each of the regulated emissions throughout the vehicle or engine’s useful life.